DWR Climate News Digest

August 26th - September 30th, 2013

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The information provided herein is a selected compilation of recent popular news articles, publications, and other information relevant to climate change and water management. The links provided herein are intended to provide educational and thought-provoking material for water managers and water users.

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TOPICS [Find older items in the Climate News Archive]

Reports

Climate Change 2013: The Physical Science Basis - Summary for Policymakers

(This 5th Assessment Report from Working Group 1 of the from the Intergovernmental Panel on Climate Change states with more certainty than ever before that "human influence on the climate system is clear...evident from the increasing greenhouse gas concentrations in the atmosphere, positive radiative forcing, observed warming, and understanding of the climate system. It is **extremely likely** that human influence has been the dominant cause of the observed warming since the mid-20th century")

<u>Watershed Modeling to Assess the Sensitivity of Streamflow, Nutrient, and Sediment Loads</u>
<u>to Potential Climate</u> [US EPA - September 2013]

Explaining Extreme Events of 2012 from a Climate Perspective

[Bulletin of the American Meteorological Society - September 2013] ("Approximately half the analyses found some evidence that climate change was a contributing factor to the extreme event examined, though the effects of natural fluctuations of weather and climate on the evolution of many of the extreme events played key roles as well")

Climate Change and the Californian Mind

[Yale Project on Climate Change Communication - September 2013] (79% of Californians believe global warming is happening, and 58% believe that it is mostly due to human activities)

<u>Published Literature</u>

<u>Changes in ecologically critical terrestrial climate conditions</u> [Science - August 2013] ("Inertia toward continued (GHG) emissions creates potential 21st-century global warming that is comparable in magnitude to that of the largest global changes in the past 65 million years but is orders of magnitude more rapid")

Grants and Other Funding Opportunities

Environmental Solutions for Communities Grant Program 2014 Request for Proposals

Wells Fargo and the National Fish & Wildlife Foundation seek to promote sustainable communities through Environmental Solutions for Communities by supporting highly-visible projects that link economic development and community well-being to the stewardship and health of the environment. Collectively, investments under this initiative will promote a sustainable future for communities by:

- Supporting sustainable agricultural practices and private lands stewardship;
- Conserving critical land and water resources and improving local water quality;
- Restoring and managing natural habitat, species and ecosystems that are important to community livelihoods;
- Facilitating investments in green infrastructure, renewable energy and energy efficiency;
 and
- Encouraging broad-based citizen and targeted youth participation in project implementation.
- To be considered for funding, proposals must be submitted online (www.nfwf.org/easygrants) by **December 16, 2013**.

<u>Sea-level Rise and other Ocean Impacts</u>

Stronger winds may explain puzzling growth of sea ice in Antarctica, model shows
[Science Daily - September 18, 2013]

<u>Tiny plankton could have big impact on climate: CO2-hungry microbes might short-circuit the</u>
<u>marine foodweb</u> [Science Daily - September 13, 2013]

<u>Sea Change - The Pacific's Perilous Turn</u> [Seattle Times - September 11, 2013]

("Ocean acidification, the lesser-known twin of climate change, threatens to scramble marine life on a scale almost too big to fathom")

Climate change will upset vital ocean chemical cycles, research shows

[Science Daily - September 8, 2013]

The Pacific Ocean fills in another piece of the global warming puzzle

[The Guardian - September 3, 2013] ("Evidence continues to mount that the slowed warming of global surface temperatures is mainly due to changes in the oceans")

The oceans are acidifying at the fastest rate in 300 million years. How worried should we be?
[Washington Post - August 31, 2013]

Ocean saltiness provides clues to precipitation patterns [NOAA - August 28, 2013]

Ocean acidification may amplify global warming this century up to 0.9°F [Climate Progress - August 26, 2013]

Agriculture/Food Production

Regulations worry Yolo County farmers more than climate change itself

[Daily Democrat - September 10, 2013]

Crop pests on the move due to climate change [Scientific American - September 3, 2013]

General Water Management

<u>Current pledges to reduce greenhouse gas emissions put over 600 million people at risk of higher water security</u> [Science Daily - September 12, 2013]

Extreme Weather Events

After the storms, a different opinion on climate change [Science Daily - September 19, 2013]

Heatwave and wildfires worsened Colorado flooding [New Scientist - September 17, 2013]

Climate change doubles likelihood of Sandy-level floods in NYC

[Bloomberg - September 5, 2013]

New analyses find evidence of human-caused climate change in half of the 12 extreme

weather and climate events analyzed from 2012 [NOAA - September 5, 2013] (get the full report HERE)

Wildlife and Ecosystem Impacts

Novel method to identify suitable new homes for animals under threat from climate change [Science Daily - September 5, 2013]

The dung beetle is a climate change hero [Wunderground - August 28, 2013]

Greenhouse Gas Mitigation

Feeding cows different food could lower their emissions by 30 percent

[Climate Progress - September 26, 2013]

EPA moves to limit emissions of future coal and gas-fired power plants

[Washington Post - September 19, 2013]

Four charts that prove the future of clean energy is arriving

[Green Tech Media - September 18, 2013]

Delaying climate policy would triple short-term mitigation costs

[Science Daily - September 12, 2013]

U.S., China, and G-20 nations take big step forward to regulate potent greenhouse gases

[Think Progress - September 6, 2013]

[fact sheet] California's Energy Efficiency Success Story: Saving Billions of Dollars and Curbing

Tons of Pollution [NRDC - July 2013]

Climate Adaptation

Louisiana's Gulf Coast adapts to global warming's rising seas

[Marketplace - September 9, 2013]

BLOGS/Commentary

Shauna Theel on "Reporting on Climate Change, 'The Mother of All Risks'"

[Media Matters for America - September 30, 2013]

Joe Romm on "Faux pause: Ocean warming, sea level rise and polar ice melt speed up, surface

warming to follow" [Climate Progress - September 25, 2013]

Richard Muller on "A pause, not an end, to warming" [New York Times - September 25, 2013]

Leo Hickman on "The era of climate change 'denial' is over" [The Guardian - August 28, 2013]

Additional Items of Interest

UN climate panel endorses ceiling on global emissions [New York Times - September 27, 2013]

Global warming is real IPCC repeats - now can we do something about it? [Scientific American

- September 27, 2013]

IPCC revises climate sensitivity [Scientific American - September 27, 2013]

Climate change action could save 500,000 lives annually, study says

[National Geographic - September 26, 2013]

Does "global warming pause" debate miss big picture?

[National Geographic - September 25, 2013]

What 95% certainty of warming means to scientists

[San Jose Mercury News - September 24, 2013]

How the insurance industry is dealing with climate change [Smithsonian - September 24, 2013]

Children will bear brunt of climate change impact, new study says

[Guardian - September 22, 2013]

Journalists should talk about climate change more like a pension policy, study suggests

[Climate Progress - September 19, 2013]

<u>Planes need a California emissions standard</u> [SF Gate - September 17, 2013]

Human activity affects vertical structure of atmosphere temperature

[Science Daily - September 17, 2013]

Wasted food is world's third-biggest carbon emitter after China and US: UN

[ABC(Australia) - September 11, 2013]

<u>Teaching climate change to skeptics</u> [Forbes - September 9, 2013] (Harvard business school faculty members aim to shift the debate about climate change to a "practical conservation about business assessment")

A climate alarm, too muted for some [New York Times - September 9, 2013]

Researchers read the coffee grounds and find a promising energy resource for the future

[Science Daily - September 9, 2013] (using waste coffee grounds as an energy source could divert more than one million tons of waste that would otherwise go to a landfill)

Global warming in one unmistakably compelling chart [Washington Post - September 4, 2013]

Wildfires and climate change [New York Times - September 4, 2013]

NASA study eyes soot's role in 1800s glacier retreat [Jet Propulsion Lab - September 3, 2013]

The Pacific Ocean fills in another piece of the global warming puzzle

[Guardian - September 3, 2013]

Population growth increases climate fear [SF Gate - September 2, 2013]

New report details billion-dollar markets in climate change adaptation

[EcoBusiness - August 29, 2013]

Images to Ponder

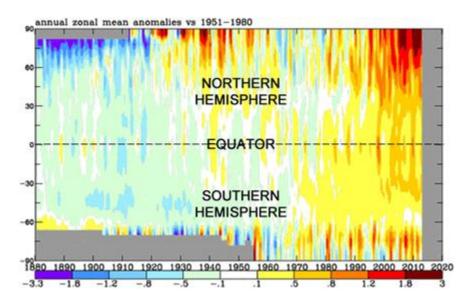


Image credit: http://www.washingtonpost.com/blogs/capital-weather-gang/wp/2013/09/04/an-unmistakably-compelling-chart-of-global-warming/

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